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Summary of Communicable Disease, 2005

Washington State has tracked notifiable conditions since the 1880s. The notifiable conditions rules (Washington Administrative Codes 246-100 and 246-101) outline requirements for disease reporting. Healthcare providers and facilities, laboratories, veterinarians, food service establishments, childcare facilities and schools must notify local health jurisdictions and/or the Washington State Department of Health (DOH) of specified conditions, including certain communicable diseases, as well as of disease outbreaks.

Reports from local health jurisdictions are summarized by DOH for national reporting through the Centers for Disease Control and Prevention (CDC). Notifiable conditions are reported for two reasons: 1) public health agencies can act quickly to prevent the spread of disease and, 2) disease trends can be followed at the local, state and national levels.

The 2005 Communicable Disease Report is available at http://www.doh.wa.gov/notify/other/2005cdr/cdr2005.pdf . The report summarizes trends in notifiable communicable diseases reported to local health jurisdictions in 2005. Gastrointestinal illness caused by enteric bacterial pathogens, pertussis and sexually transmitted infections continue to be the most commonly reported conditions in Washington.

Foodborne and Enteric Disease

Rates of foodborne and enteric disease in Washington are below national averages with the exception of campylobacteriosis (16.7 cases/100,000 population compared to 12.8/100,000 for the United States) and infections caused by enterohemorrhagic *Escherichia coli* (2.4 cases/100,000 compared to 1.2 cases/100,000 for the United States). Campylobacteriosis was the most frequently reported enteric disease in Washington in 2005, with 1,045 cases representing 51% of all bacterial enteric disease reports. In 2005, 149 cases of

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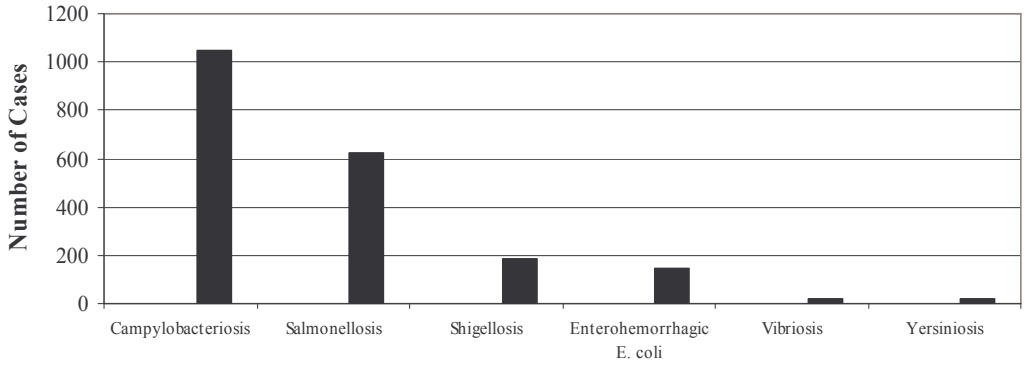
Washington State Department of Health

*epi*TRENDS
P.O. Box 47812
Olympia, WA 98504-7812

Mary C. Selecky
Secretary
Maxine Hayes, MD, MPH
State Health Officer
Jo Hofmann, MD
State Epidemiologist for Communicable Diseases
Deborah Todd, RN, MPH
Managing Editor
Marcia J. Goldoft, MD, MPH
Scientific Editor

enterohemorrhagic *E. coli* were reported in Washington, the majority due to *E. coli* O157:H7. Infection with enterohemorrhagic *E. coli* is seasonal with most cases occurring during the summer months. In 2005, 57% of reported cases with onset date reported had onset of illness June through September.

Enteric diseases – number of cases by disease type, 2005



Several outbreaks of enteric and foodborne disease were investigated by local health jurisdictions. These included an outbreak of *Salmonella* Ohio linked to handling baby chicks and *E. coli* outbreaks associated with exposures such as salsa, produce, unpasteurized milk and visiting county fairs. Collaborative investigations with multiple jurisdictions and agencies included a multi-county outbreak of *S.* Enteritidis associated with consumption of brown organic eggs; a multi-state outbreak of *S.* Typhimurium linked to ice cream prepared with packaged, uncooked cake mix; and an outbreak of *S.* Thompson in Washington, Oregon, British Columbia and Alberta associated with handling pet treats. Two outbreaks of *Clostridium perfringens* were reported, one related to improper cooling of barbecue pork, the other involving improper cooling of taco meat. Three outbreaks of *Bacillus cereus* were reported, all involving improper holding or storage of foods.

Pertussis

In 2005, pertussis remained a significant problem in Washington; more than a thousand infections were reported and the incidence of 16.4 cases/100,000 population far exceeded CDC's estimated national incidence of 8.5 cases/100,000 for the year. The number of cases reported in Washington in 2005 represents a 78% increase compared to 2002 and a more than five-fold increase from 2001. Increased rates, both nationally and in Washington, could be due to a combination of heightened surveillance and improved testing, along with a genuine increase in disease burden.

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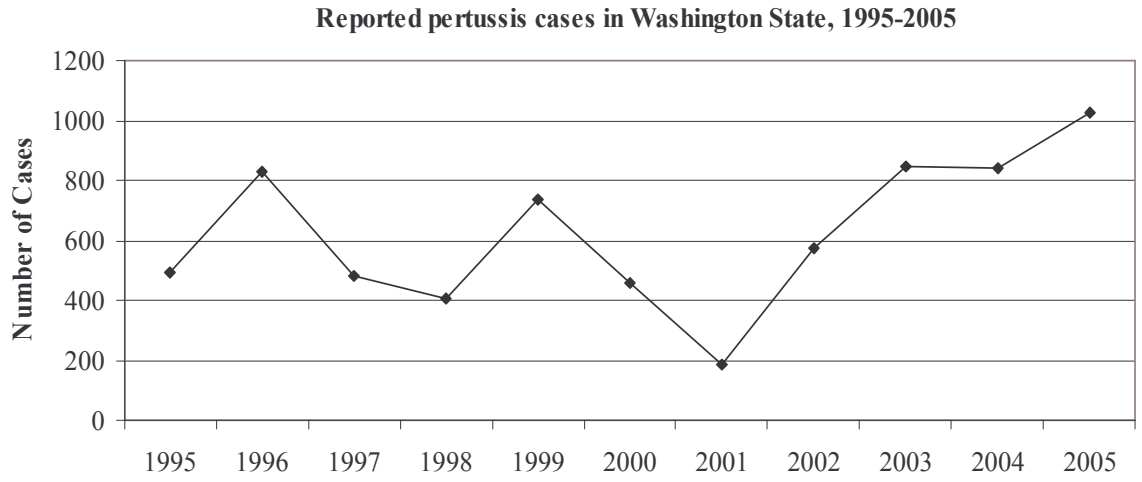

During 2005, infants under one year of age had a very high incidence of pertussis (200.4 cases/100,000 population) and comprised 16% of reported cases. Most of these cases were under six months of age. Fourteen percent of reported cases were in the 1-4 year age group, 13% in the 5-9 year age group and 27% were adolescents 10-19 years of age. Adults over 20 years of age comprised 30% of reported pertussis cases. As about 60% of pertussis in Washington occurs among those 10 years of age and older, for whom waning immunity to pertussis plays a significant role, acellular pertussis vaccines licensed for adolescents and adults in 2005 may decrease the rate of pertussis in this population and diminish a source of infection for under- and unimmunized children. The vaccine includes tetanus and diphtheria components and can be given as a routine booster dose.

Sexually Transmitted Diseases

Rates of infection with *Chlamydia trachomatis* remain high in Washington with 18,617 infections reported in 2005, an incidence of 297.6 cases/100,000 population. In addition, the rates of primary and secondary syphilis in Washington continue to rise.

The increase in chlamydia cases can be attributed to multiple factors including more sensitive laboratory techniques, availability of patient-friendly urine tests, an increase in routine screening, improved surveillance and reporting and an increase in risky sexual behaviors. Moreover, many providers of reproductive health and sexually transmitted diseases services selectively target women for chlamydial screening, which may help account for the high female to male ratio (2.6:1) observed among reported cases.

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Zoonotic Diseases

During 2005, three Washington residents were infected with West Nile virus (WNV) after being exposed to infected mosquitoes in other states with ongoing outbreaks (California and Illinois). At the end of the season in 2005, Washington had not yet reported a locally acquired human WNV infection. In July 2006, a Gig Harbor resident became the first person to acquire WNV in Washington. At the publication of this article (November 2006), there have been three confirmed human WNV infections acquired within Washington State.

Tularemia, also known as rabbit or deerfly fever, is an acute bacterial zoonosis caused by *Francisella tularensis.* A record number of persons with tularemia was reported in 2005. Infection may develop following several routes of exposure: deerfly or tick bite, handling infected animals, ingesting contaminated food or water, mucous membrane contact with contaminated water and inhalation of bacteria aerosolized by mowing or other garden equipment. The ten reported cases were unrelated and were associated with insect bites and use of power landscaping tools.

Additional surveillance information

Additional information on communicable disease surveillance, including reporting requirements and printable posters, is available at: http://www.doh.wa.gov/notify, or by contacting the Department of Health Communicable Disease Epidemiology Section at 206-418-5500 or 877-539-4344.

The Department of Health is grateful to healthcare and other professionals who continue to report notifiable conditions and to the staff of Washington's local health jurisdictions who have contributed to disease surveillance, investigation and prevention in our state.

The EpiTrends editorial staff extend
their sincere thanks to
Amynah Janmohamed, MPH
for her excellent work on the
Communicable Disease Annual Report
the past three years. We wish her the best
as she moves on in her global health career.

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Annual Surveillance Data by County, 2005

Washington State Department of Health

County	Campylobacteriosis	E. coli	Salmonellosis	Shigellosis	Hepatitis A	Hepatitis B	Meningococcal Disease	Pertussis
Adams	4	0	4	0	0	0	0	0
Asotin	0	1	2	0	0	0	0	0
Benton	26	3	19	5	1	0	0	7
Chelan	9	1	8	4	1	0	0	1
Clallam	7	1	4	0	3	0	1	5
Clark	57	30	40	10	7	13	6	61
Columbia	0	0	0	0	0	0	0	0
Cowlitz	16	7	4	2	2	5	3	4
Douglas	0	0	0	1	0	0	0	0
Ferry	2	0	0	0	0	0	0	0
Franklin	6	2	7	0	0	0	0	2
Garfield	1	0	1	0	0	0	1	0
Grant	19	0	5	3	5	1	1	4
Grays Harbor	10	2	3	0	0	1	1	2
Island	10	2	10	1	0	0	0	5
Jefferson	8	0	2	1	0	0	0	8
King	337	43	214	72	16	23	14	316
Kitsap	28	9	19	1	1	6	1	60
Kittitas	6	1	4	0	0	0	0	5
Klickitat	4	1	2	1	0	0	0	0
Lewis	16	1	2	2	0	0	2	14
Lincoln	1	0	0	0	0	0	1	1
Mason	5	1	4	0	0	0	0	5
Okanogan	0	0	2	1	0	0	0	0
Pacific	3	0	2	0	0	0	1	0
Pend Oreille	0	0	0	0	0	0	0	0
Pierce	48	6	52	12	5	5	7	70
San Juan	2	0	1	0	0	0	0	12
Skagit	22	2	13	10	1	0	0	40
Skamania	2	0	0	0	0	0	0	0
Snohomish	110	17	69	16	11	6	4	55
Spokane	74	3	40	6	1	14	5	19
Stevens	2	0	1	0	0	0	0	0
Thurston	26	4	23	3	3	1	0	14
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	2	0	1	0	0	0	0	4
Whatcom	66	9	16	5	2	4	3	120
Whitman	0	0	0	0	1	0	0	3
Yakima	116	3	52	29	3	1	2	189
Statewide total	**1,045**	**149**	**626**	**185**	**63**	**80**	**53**	**1,026**